

NEW APTEROUS ARADIDAE FROM THE WESTERN HEMISPHERE (Hemiptera)

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The discovery of several species of wingless Aradidae in the western Hemisphere adds to the complexity of the family, particularly as it relates to generic kinships. The forms described below belong to the *Mezirinae*, and because of their peculiar structural features can not be assigned to any existing genera. The types are in the authors' collections.

ACARICORIS, new genus

Apterous, obovate, almost naked, shiny, strongly rugose, the rugae irregular and mostly longitudinal. Head subequally as long as broad, deeply grooved above, strongly narrowed behind eyes, the sides rough, but without post-ocular spines. Eyes exserted. Tylus moderately long, narrow. Jugae moderately slender, surpassing tylus, their tips bluntly pointed, slightly divaricating. Antenniferous tubercles stout, faintly divaricating, somewhat inflated beneath, their tips blunt. Antennae moderately stout, not quite twice as long as head, practically nude, minutely granulate, first segment longest and stoutest, slightly curved, second half as long as first, third slenderest, fourth enlarged distally, its apex with fine hairs. Rostrum not reaching base of head, its sulcus wide, shallow, with lateral edges and posterior end carinate. Thorax with indistinct separation between metanotum and abdomen, in front wider than head, the anterior angles rounded, gradually widened backwards, with only slight marginal indentations at the segmental junctures; pronotum with a fine collar, the posterior margin sinuate, its middle with a deep notch into which projects an angular prominence on front of mesonotum. Wing pads and triangular scutellum entirely absent. Legs wide apart, short, moderately stout, almost naked, the femora slightly granulate, unarmed. Connexivum wide, without conspicuous lateral expansions, separated from abdomen above and beneath by a distinct groove. Stigmata located along lateral margin, being placed progressively nearer the edge until the last two or three are in the margin and visible from above. Abdomen with disc arched above and beneath.

Genotype: Acaricoris ignotus, n. sp.

In body shape, somewhat suggestive of *Emydocoris* Usinger but markedly different in the characters of the head and antennae, the surface sculpture and in the location of the spiracles.

Acaricoris ignotus, new species

Small, ferruginous-brown, shiny, almost naked. Head brown, about as long as broad (32:33), faintly widened in front of eyes, strongly, somewhat roundly narrowed behind eyes, the tip distinctly notched. Antennae brownish-black, segment 1 constricted at base, surpassing tylus by half its own length; proportional length of the segments, 16:8:14:13. Rostrum brownish. Thorax broader than long, strongly rugose, raised laterally, the mesonotum and meta-

notum with a median triangular raised area whose apex is at base of pronotum. Abdomen above with a raised blackish area near middle. Connexival segments (and abdomen above, though less distinctly so) with indications of the ringlike impressions evident on some other genera. Legs dark brown, the tibiae paler. Genital plates large, quadrangular.

Length, 3.90. *Width*, 1.9 mm, (abdomen) 2.0 mm.

Holotype.—Female, Winfield, Kisatche Forest, Louisiana, July 13, 1943, V. E. Shelford.

This is the first record of the occurrence of an apterous mezirine aradid in the United States. The species is unique in its evenly rounded ovate body, and at first glance has much the facies of an unfed tick.

GLYPTOCORIS, new genus

Apterous, oblong-oval, naked, shiny, with prominent elevations and pits above, the lateral edges and some of the elevations granulose. Head subquadrate, the post-ocular part very coarsely granulate. Tylus raised, narrow. Jugae narrow, slightly surpassing tylus, and slightly divaricating so that apex of head is notched. Antenniferous tubercles very stout, somewhat bulbous at base beneath, their tips blunt. Antennae not twice as long as head, rather stout, slightly granulate, first segment stoutest, curved, exceeding jugae by half its own length, second slightly enlarged distally, third slender, longest, fourth clavate, slightly longer than second, its apex narrowed and prominently setose. Rostrum short, the sulcus wide, shallow, with raised margins laterally and posteriorly. Thorax broader than long, with the segments sharply delimited, the lateral edges with small projections; pronotum in front wider than head, with prominent collar, the disc with a conspicuous excavation behind; mesonotum and metanotum with a granular median longitudinal prominence.

Legs widely separated, short, stout, the femora unarmed. Connexivum and abdomen, above and beneath, with a complicated pattern of elevations and depressions, the connexivum distinctly marked off. Stigmata laterad as in *Acaricoris*, n. genus. Male genital segment swollen above, suggestive of *Mezira*.

Genotype.—*Glyptocoris sejunctus*, n. sp.

Similar to *Acaricoris* new genus, in position of spiracles, but differing in body form, sculpture, antennal proportions, and in the subquadrate head.

Glyptocoris sejunctus, new species

Brownish-black, oblong-oval. Head subquadrate, rugose, slightly widened behind eyes, thence moderately roundly narrowed posteriorly; jugae projecting a little beyond tylus, rounded, the tips turned outward, not quite reaching middle of first segment of antennae. Antenniferous tubercles prominent, directed outwardly, terminating in blunt points. Antennae moderately stout, brownish, segment I very stout, bowed; II widened toward apex; III slender, sub-cylindrical; IV sub-clavate, with long hairs on distal half; proportions,

17:12:22:14. Rostrum short, brownish, not reaching the end of the wide sulcus; the sulcus with lateral edges and apex carinate.

Thorax widest at base, about one and one-half times as broad as long at mid-line, the sides scalloped, with short prominences; pronotum slightly longer than mesonotum, slightly elevated laterally, deeply narrowly excavated at middle behind; mesonotum and metanotum broadly elevated down the middle, with the median line sunken as a longitudinal groove. Abdomen above with three disc-like impressions on each side, connexivum with four shallower, but somewhat similar impressions; disc of abdomen with a very large, dark elevation near the center, this prominence somewhat impressed behind its summit.

Prosternum carinate along median line, mesosternum with a distinctly impressed area at the middle, metasternum with a similar but larger area. Abdomen beneath with smooth, flattened areas along the median line, the sixth segment with a somewhat obovate, raised area on each side. Legs moderately stout, rather short, brown, finely granulate. Genital segment blackish, swollen above.

Length, 4.50 mm. *Width*, 2.10 mm.

Holotype.—Male, Nova Teutonia, Brazil, Fritz Plaumann, collector.

This species has the post-ocular part of head more nearly like *Emydocoris testudinatus* Usinger than either of the other species.

ERETMOCORIS, new genus

Apterous, elongate-oval, shiny, the appendages and lateral margins setose. Head subequally as long as broad, faintly widened in front of eyes, strongly obliquely narrowed behind the eyes. Tylus high, narrow. Jugae slender, pointed, protruding beyond tip of tylus. Antenniferous tubercles rather stout, narrowed apically. Antennae moderately stout, first segment longest and stoutest, curved, projecting one-half its length beyond tip of jugae, second and third subequal in thickness and in length, fourth a little stouter and a little longer than third. Rostral sulcus very wide and shallow, its edges raised but not as incrassate as in related genera. Thorax with median ridge less pronounced than in related genera, the lateral edge sinuate, with projections, the pronotum distinct, the metanotum and first abdominal segment apparently fused. Legs short, stout, conspicuously setose, the setae short, bristly. Connexivum sharply marked off, slightly narrowed from base to middle, the edge somewhat sinuate, the apical segments prominently expanded laterally. Stigmata marginal in position, the posterior ones visible from above. Male genital capsule bulbous.

Genotype.—*Eretmocoris tatei*, n. sp.

Related to *Acaricoris*, n. genus in the position of the stigmata and the narrowed post-ocular part of head, but distinct by virtue of the expanded lateral margins, the bristly setose antennae and legs, the different nature of tylus, jugae, and sculpture.

Eretmocoris tatei, new species

Small, reddish brown, oblong-ovate. Head ridged, subequally as long as broad, strongly narrowed behind eyes; tylus long, narrow; jugae projecting in front of tylus, faintly divaricating. Antenniferous tubercles very prominent, divaricating, terminating in blunt points. Eyes moderately large, exerted. Rostrum short, brown, the sulcus very broad, shallow. Antennae rather stout, beset with bristly hairs, segment I stout, thickest beyond middle, faintly bowed, II and III subequal in thickness, IV stouter than III, thickest a little before apex; proportions, 24:11:13:15.

Thorax rugose, wider than long, ridged down the middle, with a median impressed line; prothorax shorter than mesothorax; meso- and metathorax progressively widened backwards. Abdomen with connexivum moderately raised outwardly, the fourth, fifth, and sixth segments with small lateral projections, the last named largest. Legs moderately stout, dark brown, beset with numerous, short bristly hairs. Body beneath reddish brown. Genital segments large, rounded above.

Length, 3.40 mm. Width, 1.55 mm.

Holotype.—Male, Lares, Puerto Rico, May 26, 1937, H. D. Tate, collector.

KEY TO AMERICAN GENERA OF APTEROUS ARADIDAE

1. Stigmata marginal or submarginal in position, located at or in lateral edge of connexival segments..... 3
 Stigmata located at or near middle of connexival segments, far removed from lateral edge..... 2
2. Head subquadrate, with large subangular lobes behind the eyes. Body surface entirely naked. Connexival segments not produced
 Emydocoris Usinger
 Head subtriangular, strongly narrowed behind eyes. Body surface clothed with short, appressed hairs. At least some of connexival segments strongly laterally produced into distinct lobes.
 Notoplocoris Usinger
3. Head subquadrate, with flattened, granular lobes behind eyes. Pronotum with front margin strongly excised each side of the well-developed collar. Metanotum not fused with first abdominal segment.....*Eretmocoris*, new genus
 Head subtriangular, strongly, obliquely narrowed behind eyes. Pronotal collar not sharply marked off. Metanotum and first abdominal segment apparently not distinctly separate..... 4
4. Form ovate, the margins rather evenly rounded and not conspicuously notched or lobulate. Surface conspicuously rugose. Legs and antennae practically naked, only with the very finest pubescence
 Acaricoris, n. genus
 Form oblong-ovate, the lateral margins conspicuously undulate, with distinct notches and lobulate projections. Surface sculptured with irregular depressions. Legs and antennae clothed with conspicuous short, bristly hairs.....*Eretmocoris*, n. genus

• LIST OF APTEROUS AMERICAN ARADIDAE

1. *Notoplocoris montei* Usinger, 1941 Brazil
2. *Notoplocoris potentis* D. & H., 1944..... Brazil
3. *Emydocoris testudinatus* Usinger, 1941..... Brazil
4. *Acaricoris ignotus* H. & D., n.sp..... Louisiana
5. *Glyptocoris sejunctus* H. & D., n.sp..... Brazil
6. *Eretmocoris tatei*, H. & D., n.sp..... Puerto Rico

A CORRECTION IN ANOPHELINE NOMENCLATURE¹
(Diptera : Culicidae)

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A study of the literature and of recently collected specimens from Melanesia reveals that the name of the anopheline heretofore treated as *Anopheles punctulatus moluccensis* (Sw. and Sw. de Graaf), at least for material from the New Hebrides, must be corrected.⁴ The following synonymy shows the necessity of designating this subspecies as *Anopheles punctulatus farauti* Laveran because of priority.

1902. *Anopheles Farauti* Laveran, C. R. Soc. Biol. Paris 54:908 (♀ ♀ only).
Type locality: Faureville, Ile Vaté [Efate], New Hebrides. **Type material:** present location unknown. **Pertinent descriptive facts:** "Coloration générale brun foncé, noirâtre. Tête: Ecailles brunâtres, courtes à la nuque. Proboscide de même longueur que les palpes, blanchâtre à l'extrémité apicale [labella]." [General coloration dark brown, blackish. Head: scales brownish, short on the nape. Proboscis of the same length as the palpi, whitish at the apical extremity.]
1920. *Nyssorhynchus annulipes* var. *moluccensis* Swellengrebel and Swellengrebel de Graaf, Geneesk. Tijd. Ned.-Ind. 60(1):29. [Received in USNM Library, June 8, 1920] (♂ ♂ and ♀ ♀). **Type locality:** None given, but the following collection localities are listed: Boeroe (Lisela, Namlea), Amboina (Roemah tiga, north coast of Binnenbaai, Gelala, Paso and Ambon), Ceram (Piroe, Boelabaai, and Amahei), Halmahera

¹ The authors wish to thank Dr. Alan Stone, Division of Insect Identification, U. S. Department of Agriculture, for his helpful suggestions and for his assistance.

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⁴ The opinions expressed in this article are those of the authors and are not to be construed as official or reflecting the views of the Navy Department, or of the Naval Service at large.